

ABSTRACT

It is the objective of the present invention to provide a sensorless vector control method and a control apparatus, for an alternating-current motor, that can smoothly restart an alternating-current motor in the free running state.

According to the present invention, when a current that flows in an alternating-current motor (2) at a restart time 7 the alternating-current motor (2) continuously flows at a designated current level or higher for a designated period of time, it is determined that the rotational direction or the velocity of the alternating-current motor (2) is incorrectly estimated, and a direct current or a direct-current voltage is again applied to again estimate the rotational direction and the velocity.